

Title (en)  
IMPROVED SYRINGE

Title (de)  
VERBESSERTE SPRITZE

Title (fr)  
SERINGUE AMELIOREE

Publication  
**EP 1879634 A2 20080123 (EN)**

Application  
**EP 06739845 A 20060328**

Priority  

- US 2006011312 W 20060328
- US 67911305 P 20050509
- US 38762506 A 20060323

Abstract (en)  
[origin: WO2006121513A2] A retractable needle safety syringe is provided having mitigated retraction. The syringe comprises a syringe body, a syringe cavity, a plunger, a variable vacuum compartment, a shaft brake, and a ram member. The plunger assembly includes a plunger shaft and a piston slidably engaged within the syringe body. The variable vacuum compartment is disposed within the syringe cavity and provides a vacuum force on the plunger shaft directed from a bottom syringe body end toward a top syringe body end. The shaft brake, being attached to the top syringe body end, may frictionally engage the plunger shaft to provide first and second frictional forces in opposition to the vacuum force, the first frictional force being exerted prior to the piston reaching the bottom syringe body end, the second frictional force being exerted in response to the engagement of the ram member with the shaft brake.

IPC 8 full level  
**A61M 5/32** (2006.01)

CPC (source: EP US)  
**A61M 5/3234** (2013.01 - EP US); **A61M 2005/3151** (2013.01 - EP US); **A61M 2005/3242** (2013.01 - EP US)

Designated contracting state (EPC)  
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DOCDB simple family (publication)  
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